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## CLAIMS:

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What is claimed is:

A wireless communication system that provides wireless service to at 1. least one mobile unit operating within a service area, the wireless communications system comprising:

at least one first cell for communicating with at least one mobile unit, the at least one first cell operating on a first carrier frequency, the first carrier frequency including a paging channel and a sync channel; and

at least one second cell for communicating with the at least one mobile unit, the at least one second cell operating on a second carrier frequency, the second carrier frequency including a syne channel that directs at least one of the at least one mobile units to tune to the paging channel of the first carrier frequency.

- The system of Claim 1 further comprising at least one base station 2. serving at least one of the at least one first cell and at least one of the at least one second cell.
- The system of Claim 1 further comprising at least one base station 3. capable of operating on the first carrier frequency and on the second carrier frequency, the at least one base station serving at least one of the at least one first cell and at least one of the at least one second cell.
- The system of Claim 1\further comprising at least one first base 4. station serving at least one of the at least one first cell and at least one second base station serving at least one of the at least one second cell.

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- 5. The system of Claim 1 further comprising at least one base station controller coupled to at least one first base station serving at least one of the at least one first cell and to at least one second base station serving at least one of the at least one second cell.
- 6. The system of Claim 1 further comprising at least one mobile switching center coupled to at least one base station controller, the at least one base station controller coupled to at least one base station, the at least one base station serving at least one of the at least one first cell and at least one of the at least one second cell.
- 7. The system of Claim 1 further comprising at least one mobile switching center coupled to at least one base station controller, the at least one base station controller coupled to at least one first base station operating on the first carrier frequency and to a second base station operating on the second carrier frequency.
- 8. The system of Claim wherein a CDMA\_FREQ field of a sync channel message of the sync channel of the second carrier frequency contains the frequency of the paging channel of the first carrier frequency.
- 9. The system of Claim 1, wherein the paging channel of the first carrier frequency includes a Channel List Message in which every paging channel listed therein is a paging channel of the first carrier frequency.
- 1 10. The system of Claim 1 further comprising a traffic allocation 2 algorithm.

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1 The system of Claim 1 further comprising Multi-Carrier Traffic 2 Allocation (MCTA).

The system of Claim 1 wherein the system utilizes code division multiple access (CDMA).

13. The system of Claim 1 wherein a Pilot\_PN field of a sync channel message of the sync channel of the second carrier frequency contains a Pilot\_PN of the first carrier frequency.

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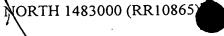
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A method of operation of a wireless communications system 14. comprising the steps of:

a mobile unit initializing on a first carrier frequency; and

transmitting a message to the mobile unit on a sync channel of the first carrier frequency, the message directing the mobile unit to tune to a paging channel of a second carrier frequency.

- The method of Claim 14 wherein the step of initializing is preceded 15. by the mobile unit being powered up.
  - The method Claim 14 wherein the step of initializing is preceded by a 16. call release of the mobile unit.
  - The method of Claim 4 further comprising the step of, in response to 17. the message directing the mobile unit to tune to the paging channel of the second carrier frequency, tuning the mobile unit to the paging channel of the second carrier frequency.
    - The method of Claim 14 further comprising the steps of: 18.

in response to the message directing the mobile unit to tune to the paging channel of the second carrier frequency, tuning the mobile unit to the paging channel of the second carrier frequency; and

monitoring the paging channel of the second carrier frequency.

The method of Claim 14 wherein a sync channel message of the sync 19. channel of the first carrier frequency is configured with a CDMA\_FREQ field directing the mobile unit to the paging channel of the second carrier frequency.



1	20.	The method of Claim 14 wherein the first carrier frequency does n	.01
2	have a paging	channel.	

- 21. The method of Claim 14 wherein the system utilizes code division multiple access (CDMA).
- 22. The method of Claim 14 wherein a Pilot\_PN field of a sync channel message of the sync channel of the first carrier frequency contains a Pilot\_PN of the second carrier frequency.

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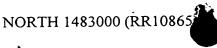
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performance of wireless enhancing the 23. method of telecommunications system comprising the steps of:

configuring a sync channel of at least one non-primary carrier frequency with a paging channel of at least one primary carrier frequency;

configuring the at least one non-primary carrier frequency to not include a paging channel; and

configuring a channel list message of the at least one primary carrier frequency with the paging channel of the at least one primary carrier frequency.

- The method of Claim 23 wherein a sync channel message of the sync 24. channel of the non primary carrier frequency includes a CDMA\_FREQ field directing at least one mobile unit to the paging channel of the primary carrier frequency.
- The method of Claim 23 wherein the non-primary carrier frequency 25. does not include a paging channel.
- The method of Claim 23 wherein the system utilizes code division ' 26. multiple access (CDMA).
- The method of Claim 23 wherein a Pilot\_PN field of a sync channel 27. message of the sync channel of the non-primary carrier frequency contains a Pilot\_PN of the primary frequency.

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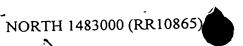


28. A method of performing an idle-mode handoff in a wireless communication system comprising the steps of:

sending a neighbor list message to at least one mobile unit operating on a non-primary carrier frequency in a first cell, the neighbor list message instructing the at least one mobile unit to acquire a sync channel of a second cell, the second cell operating on the non-primary frequency and bordering the first cell;

in response to the neighbor list message, the at least one mobile unit acquiring the sync channel of the second cell.

- 29. The method of Claim 28 further comprising the step of using the sync channel of the second cell to direct the at least one mobile unit to a paging channel of at least one primary carrier frequency.
- 30. The method of Claim 28 wherein the second cell does not contain a paging channel.
- 31. The method of Claim 29 wherein the paging channel of the at least one primary carrier frequency includes a Channel List Message in which every paging channel listed therein is a paging channel of the primary carrier frequency.
- 32. The method of Claim 28 wherein a sync channel message of the sync channel of the second cell includes a CDMA\_FREQ field with the paging channel of the primary carrier frequency.
- 1 33. The method of Claim 28 wherein the system utilizes code division 2 multiple access (CDMA).
- 1 34. The method of Claim 28 wherein the system utilizes a traffic 2 allocation algorithm.



- The method of Claim 28 wherein the system utilizes Multi-Carrier Traffic Allocation (MCTA).
- 1 36. The method of Claim 29 wherein a Pilot\_PN of a sync channel message of the sync channel of the second cell contains a Pilot\_PN of the at least one primary carrier frequency.

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